

Claims

- 1 1. A plastic control plate of a hydraulic gearbox control device in a motor vehicle,  
2 comprising  
3 - at least one channel which runs through the plastic control plate and is used for  
4 carrying a cooling medium, and  
5 - a heat conduction body which is at least partly integrated in the plastic control plate  
6 and is arranged directly adjacent to the channel.
- 1 2. The plastic control plate as claimed in Claim 1, wherein the heat conduction  
2 body is a metal plate, in particular an aluminum plate.
- 1 3. The plastic control plate as claimed in Claim 1, wherein the heat conduction  
2 body is designed in such a way that the cooling medium, in particular a hydraulic fluid,  
3 flows against it.
- 1 4. The plastic control plate as claimed in Claim 1, wherein a flat area of the heat  
2 conduction body is designed as a wall area of the channel.
- 1 5. The plastic control plate as claimed in Claim 1, wherein the heat conduction  
2 body is designed in the form of a U, wherein the inner sides of the U form wall areas  
3 of the channel.
- 1 6. The plastic control plate as claimed in Claim 1, wherein the upper surface of  
2 the plastic control plate is flush with the upper surface of the heat conduction body.

1 7. An arrangement comprising a plastic control plate and a gearbox control  
2 electronics system, wherein the plastic control plate comprises:  
3 - at least one channel which runs through the plastic control plate and is used  
4 for carrying a cooling medium, and  
5 - a heat conduction body which is at least partly integrated in the plastic control  
6 plate and is arranged directly adjacent to the channel, and wherein  
7 the gearbox control electronics system, in particular a substrate carrying the electronic  
8 components of said system, is arranged directly on the upper surface of the heat  
9 conduction body.

1 8. The arrangement as claimed in Claim 7, wherein the gearbox control  
2 electronics system is electrically contacted via an electrical circuit board, in particular  
3 a flexible circuit board.

1 9. The arrangement as claimed in Claim 7, wherein the gearbox control  
2 electronics system is electrically contacted via a stamped-grid arrangement, which  
3 extends partly over the upper surface of the plastic control plate and partly over the  
4 upper surface of the heat conduction body.

1 10. The arrangement as claimed in Claim 7, wherein the heat conduction body is a  
2 metal plate, in particular an aluminum plate.

1 11. The arrangement as claimed in Claim 7, wherein the heat conduction body is  
2 designed in such a way that the cooling medium, in particular a hydraulic fluid, flows  
3 against it.

1 12. The arrangement as claimed in Claim 7, wherein a flat area of the heat  
2 conduction body is designed as a wall area of the channel.

- 1 13. The arrangement as claimed in Claim 7, wherein the heat conduction body is  
2 designed in the form of a U, wherein the inner sides of the U form wall areas of the  
3 channel.
- 1 14. The arrangement as claimed in Claim 7, wherein the upper surface of the  
2 plastic control plate is flush with the upper surface of the heat conduction body.

1 15. A gearbox control system comprising:  
2 - a plastic control plate  
3 - at least one channel which runs through the plastic control plate for carrying a  
4 cooling medium,  
5 - a heat conduction body which is at least partly integrated in the plastic control plate  
6 and is arranged directly adjacent to the channel,  
7 - a gearbox control circuit arranged on a substrate which is arranged directly on the  
8 upper surface of the heat conduction body.

1 16. The gearbox control system as in Claim 15, wherein the gearbox control circuit  
2 is electrically contacted via an electrical circuit board, in particular a flexible circuit  
3 board.

1 17. The gearbox control system as in Claim 15, wherein the gearbox control  
2 system is electrically contacted via a stamped-grid arrangement, which extends partly  
3 over the upper surface of the plastic control plate and partly over the upper surface of  
4 the heat conduction body.

1 18. The gearbox control system as in Claim 15, wherein the heat conduction body  
2 is a metal plate, in particular an aluminum plate.

1 19. The gearbox control system as in Claim 15, wherein the heat conduction body  
2 is designed in such a way that the cooling medium, in particular a hydraulic fluid,  
3 flows against it.

1 20. The gearbox control system as in Claim 15, wherein a flat area of the heat  
2 conduction body is designed as a wall area of the channel.

1 21. The gearbox control system as in Claim 15, wherein the heat conduction body  
2 is designed in the form of a U, wherein the inner sides of the U form wall areas of the  
3 channel.

- 1 22. The gearbox control system as in Claim 15, wherein the upper surface of the
- 2 plastic control plate is flush with the upper surface of the heat conduction body.